Initial Study and Mitigated Negative Declaration
Environmental Summary

Tule River Indian Tribe
Special Use Permit 10-002 for
Wastewater Collection, Treatment and Disposal System and Encroachment Permits

November 30, 2011

Tulare County
Resource Management Agency,
Government Plaza
5961 South Mooney Blvd.
Visalia, CA 93277

Environmental Summary

Tulare County has the primary authority for reviewing and approving the proposed Tule River Tribe Wastewater System located within the County's jurisdiction. An Initial Study/Mitigated Negative Declaration (IS/MND) was prepared by Analytical Environmental Services for the County of Tulare. This Notice of Intent to Adopt a Mitigated Negative Declaration is being presented to reviewing agencies, other interested parties and the public for a 30 day review period.

The Tulare County Resource Management Agency (RMA) Planning Branch - Countywide Planning Division is the Lead Agency and recommending that a Negative Declaration be prepared for Special Use Permit 10-002 and Encroachment Permits for the Tule River Tribe, Wastewater Collection, Treatment and Disposal System. A copy of the IS/MND is attached as Exhibit "A" for your review.

The IS/MND contains the project description, environmental setting, and Initial Study Checklist documenting potential impacts and environmental determination for each environmental area of concern.

Comments on the IS/MND from public agencies and interested organizations and individuals are welcomed and will be provided to the Planning Commission during its review of the environmental document and Special Use Permit 10-002 and by RMA – Public Works Branch for Encroachment Permits.

The IS/MND has a public review period of 30 days, starting on November 30, 2011, and ending on January 4, 2012 at 5:00 p.m. Any written comments on the IS/MND must be sent or delivered to the Tulare County Resource Management Agency at the following address: Tulare County Resource Management Agency, Government Plaza, 5961 South Mooney Boulevard, Visalia, CA 93277 to the attention of Chuck Przybylski, Project Planner.

After the close of the public review period on the IS/MND, the Tulare County Planning Commission will hold a public hearing which will be held on a date to be scheduled later in the Chambers of the Board of Supervisors, Administration Building, County Civic Center, 2800 West Burrel, Visalia, California. The public hearing may consider adoption of the Mitigated Negative Declaration and approval of a special use permit for the project as described below. Separate notice of the public hearing will be provided to interested parties. Additionally, after consideration by the Planning Commission of the IS/MND, issuance of an encroachment permit may be considered by the reviewing authority of the County (i.e., RMA – Public Works Branch), and, thereafter, appropriate action may be taken with respect to such permit.

Project Description: Phased construction and operation of an immersed membrane bioreactor (MBR) wastewater treatment plant (WWTP) on a fenced, approximately 22,000 sq ft. portion of APN 305-130-017 to serve Tule River Tribal residences and community buildings.

The fenced area will contain a single story concrete building block operations building approximately 1,100 square feet in size. This pre-fabricated building will house five rooms for

electrical equipment and instrumentation, storage, laboratory, office and restroom. HVAC systems to control building climate and cool the electrical room will be included. A backup generator and automatic transfer switch will be included to maintain operations in the event of a power outage. The site will operate seven days a week, twenty four hours a day. The effluent basins and WWTP site are located on open grazing area.

The aerobic treatment system or ATS process generally consists of the following phases:

- Pre-treatment stage to remove large solids and other undesirable substances from the wastewater.
- Aeration stage, where the aerobic bacteria digest the biological wastes in the wastewater.
- Settling stage to allow any undigested solids to settle. This forms a sludge which must be periodically removed from the system.
- Disinfecting stage, where chlorine or similar disinfectant is mixed with the water, to produce an antiseptic output. The disinfecting stage is optional, and is used where a sterile effluent is required, such as cases where the effluent is distributed above ground. This project will not use this option.

The sewer collection system would flow by gravity to the influent pump station. The raw wastewater would then be pumped to the screening headworks. Wastewater would then be screened through a single fine rotary drum fine screen. Screened influent would then be pumped to the MBR which results in undisinfected tertiary treated effluent. Waste activated sludge would be pumped from the MBR basins to a dewatering container. Dewatered Sludge would be removed from the facility for disposal or recycling once per year. A new container would then be installed.

The entire WWTP site will be concrete to prevent infiltration of stored wastewater, furthermore, the top MBR and dewatering sludge tanks will be 10 to 15 feet above grade. The MBR and other items are concrete structures and will be impermeable. Per section 7900 2.02F submerged surfaces will utilize an "Immersed Service Sealant" such as Sika Corporation: Sikaflex 2C, Polymeric Systems Inc. PSI 270, or Pacific Polymers International: Elasto-Thane 227R. The trenches are designed with a factor of safety and in the event of severe weather the discharge of treated wastewater will be redirected to the storage tank or the overflow lagoon. Six feet of fabric with barbed wire over the top and per the Effluent Disposal and Storage Pond specification section 02832 2.04.M "Decorative polyethylene slats" will be used.

Up to a 300,000 gallon steel storage tank will be located on the WWTP site to provide storage and metering of the tertiary treated effluent to the disposal fields. The project's Title 22 tertiary level treated effluent will be disposed of via leachfields. The project also includes the construction of one bermed earthen storage basin with a capacity of one million gallons.

The wastewater effluent disposal systems would be required to comply with the objectives contained in the Central Valley Regional Water Quality Control Board (RWQCB) Water Quality Control Plan for the Tule Lake basin. Disposal by land application would be required to meet objectives established by the RWQCB along with Title 22, Article 3, Uses of Recycled Water of the California Code of Regulations. See the Initial Study and Mitigated Negative Declaration:

Wastewater collection, treatment and disposal system. August 2011, Appendix A IHS Feasibility study and Supplement, Chapter 8 for the requirements of the RWQCB.

Land application disposal methods recommended by the application are slow rate land application. The effluent would be applied to the land by a sprinkler system. In addition, pond storage areas will be constructed to contain the effluent for periods when cold/wet weather reduces wastewater applications. As a result of the intended use and human contact potential at the proposed application sites, the wastewater is treated to the Title 22 Article 3 "undisinfected" tertiary recycled water level, which allows irrigation of orchards, non food bearing trees, fodder, fiber crops and pasture.

Proposed Project

Facility	Phase 1	Phase 2
WWTP	WWTP 0.15 MGD total average daily flow capacity Influent pump station, Screening Headworks MBR (two processing trains Sludge Handling Auxiliary Facilities.	WWTP Expansion to 0.3 MGD total average daily flow capacity. MBR expansion (two additional process trains) Auxiliary facilities
Tertiary Treated Effluent Storage	Up to 300,000 gallon storage tank within the WWTP site. 0.8 MG Emergency Storage Basin.	0.3 MG Emergency Storage Basin
Tertiary Treated Effluent Disposal Facilities	Approximately 7.3 acres of leach field.	Approximately 29.8 additional acres of leach fields.
Collection System within County owned Right of Way	Approximately 2,350 linear feet of pipeline.	Approximately 3,808 linear feet of pipeline along Chimney Road.
Collection System within BLM and BIA Right of Way	Approximately 185 linear feet of pipeline within Reservation Road within lands owned by the BLM. Approximately 33,057 linear feet of pipeline within Reservation Road within lands owned by the Tribe.	Approximately 600 liner feet of pipeline along Chimney Road. Approximately 36,026 linear feet of pipeline within Reservation Road.

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For Phase 1, it is anticipated that less than 220 pounds of dry solids will be generated per day. Assuming 15% solids this will equate to approximately 21-25 cubic feet per day. Phase II will be approximately 63-75 cubic feet per day. The handling and disposal of biosolids from the WWTP will comply with the Waste Discharge Requirements issued by the RWQCB and Title 40 of the

Code of Federal Regulations, Part 503. Biosolids will be trucked to a permitted biosolids recycling and disposal facility.

Even though there has been a significant increase in available funding, it will not be possible to construct a centralized wastewater collection system for the entire Reservation. Limiting factors are the high costs to construct the sewer collection main in areas with substantial rock formations, long distances to reach homes that are not clustered, and the cost to construct a treatment and disposal system. The project will only serve residences and community buildings on the Reservation and the Lowe Ranch property (project site within the County). The proposed project will not serve the Reservation Casino or other areas outside of the Reservation.

In connection with the collection system within county owned right-of-way, Phase 1 comprises approximately 2,350 linear feet of pipeline and Phase 2 comprises approximately 3,808 linear feet of pipeline along Chimney Road.

The encroachment permit 10-305 activities proposed on and through the affected county roads are described as follows:

A 2,350 linear foot PVC sewer main in County Road M137 (Reservation Road), starting 30 feet east of Chimney Road centerline and 2,240 feet west of the Tule River Reservation entrance. The County portion of the main ends at the Reservation entrance. The main continues into the Tule River Reservation. The sewer line will be constructed within and adjacent to Reservation Road within the County right-of way.

The sewer line will be constructed in conjunction with the Tule River Wastewater Treatment Plant project. An encroachment permit application was submitted to the County on March 31, 2010 for the sewer line within the County right-of-way. The sewer main and manholes will be constructed as per plans on file and approved by the County of Tulare Engineer. A traffic control plan approved by Tulare County Engineer will be enforced.

ENVIRONMENTAL IMPACTS CHECKLIST/DISCUSSION FORM:

See attached Exhibit A Initial Study/Mitigated Negative Declaration for detailed analysis of the environmental setting, analysis and mitigation measures. A Mitigation and Monitoring Plan is also included in attached Exhibit B. This plan delineates responsibility for compliance with the mitigation measures within the jurisdiction of Tulare County.

Aesthetics: The proposed site for the WWTP and the effluent disposal fields are currently undeveloped and utilized for cattle and grazing. The ground surface is generally hill, with slopes ranging from 0 to 40%. The proposed WWTP will have a less than significant impact upon scenic vistas, scenic resources or degrade the existing visually character of the site. The WWTP is visible from Reservation Road; however, the WWTP will be screened by a six foot chain link fence with tan or dark green vertical slats to screen views.

Agricultural Resources: The Foothill Agriculture (AF) zone is an exclusive zone for exclusive agriculture. The WWTP site is under Williamson Act contract that is under non-renewal (2006).

The project is allowed under a special use permit within the AF zone. The proposed site for the WWTP and the effluent disposal fields are currently undeveloped and utilized for cattle and grazing. The proposed project would have no impact or a less than significant impact upon converting farmland, conflict with the Williamson Act program, forest land, loss of forest land or result in conversion of agriculture to a non agriculture use.

Air Quality: The proposed WWTP, collection system and disposal areas are located within the San Joaquin Valley Air Basin (SJVAB), and under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD).

Construction of the proposed project would generate criteria pollutants. These emissions, however, would not exceed the SJVAPCD threshold of 10 tons per year. The IS/MND does contain mitigation measures applicable to construction emissions from the project resulting in a less than significant impact.

Operational of the proposed project will generate some emission; however, the majority of machinery is powered offsite through electricity (except the emergency generator). With minor operational emissions from the running the machinery (indirect effects, such as greenhouse gas are discussed under greenhouse gas section). The WWTP process has the potential to emit toxic air contaminants (TAC) such as methylene chloride and benzene. According to the Appendix A IHS feasibility study, TAC emissions resulting from the proposed facility would be less than the threshold established by the SJVAPCD regulations.

The proposed project would have no impact upon sensitive receptors as the nearest residence is approximately 2,000 ft. away.

The proposed project may emit some odor. However, the design of the proposed project using an ATS system, would limit odors to a less than significant impact. An aerobic treatment system or ATS, is a small scale sewage treatment system which uses an aerobic process for digestion rather than just the anaerobic process used in septic systems. ATS effluent is relatively odorless; a properly operating system will produce effluent that smells musty, but not like sewage. Aerobic treatment is effective at reducing odors, that it is the preferred method for reducing odor from manure produced by farms.

Biological Resources: The proposed project has the potential to adversely affect special status plant and animal species, habitats and wetlands. A biological basement was prepared for the project (please see Exhibit C-Environmental Assessment; Appendix E-Biological Resources Information). Construction and operation of the proposed project would potentially occur within special status species, habitats and wetlands. Please see the IS/MND for an analysis of these special status species and habitats. The IS/MND contains several mitigation measures, including buffers, pre-construction surveys, consultation with the USFWS and training that would reduce biological impacts to less than a significant impact.

Cultural Resources: A cultural records search was conducted by AES. In 2009, the archaeologist for AES examined the WWTP and disposal field areas for cultural remains and elements of the historic environment. This examination verified a 2004 study identification of seven cultural sites.

The proposed project will avoid these sites and an appropriate setback was designed into the proposed project. No direct or indirect impacts would occur to the cultural resources of the site. The proposed project design -- given the current information -- avoided these areas. Mitigation contained in Mitigated Negative Declaration will ensure no unknown impacts would occur during an inadvertent discovery.

Geology and Soils: Construction of the proposed project will require grading and other earthwork. Grading and earthwork would result in leveling of topography of approximately seven acres. Adherence to the IS/MND's mitigation measure and compliance with the RWQCB's NPDES construction permit, which will include the use of erosion control measures, this impact would be less than significant.

Greenhouse Gas Emissions: The proposed project would emit GHGs from mobile and stationary sources during construction such as heavy equipment and worker trips. Mitigation measures provided by the IS/MND would reduce GHG emissions resulting from the construction to the extent feasible. Indirect emissions from operation of the proposed project would occur from water transport and electricity use. The estimated emissions from indirect sources estimated for the proposed project would be considered less than significant. The reason is that the estimated operational emissions from indirect sources would be reduced by increased fuel efficiency that is required under the new Cooperate Average Fuel Economy standards. These vehicles are typically used on the Reservation.

Hazards and Hazardous Materials: Construction of the proposed project within right-of-way has the potential to impact fire and emergency vehicles entering and exiting Reservation Road. The IS/MND proposes a mitigation measure to reduce this impact to less than significant. The project site is within the eastern foothills of Tulare County and contains non-native grassland and oak woodland. There is the potential for wildland fires. Operation of the proposed project would be carried out in compliance with all applicable regulations and polices of the DTSC and Cal/Osha, including those regarding emergency action and fire prevention plan preparation. The proposed project's operation building will comply with the California Building Code regarding emergency lighting and an adequate number and location of exits. Fire emergency vehicles will have constant access to the project site during construction and operation. The proposed project proposes a mitigation measure to reduce this impact to less than significant impact. The reason is that through contractual obligations and through a construction zone traffic control plan in accordance with the American Public Works Association (APWA) Work Area Traffic Control Handbook, access into and out of the Reservation will be maintained at all times during construction. Furthermore, during construction and operation of the proposed project, staging areas, welding areas will be cleared of vegetation, and construction equipment used will be maintained in good working order.

Hydrology and Water Quality: Equipment and materials used during construction have the potential to leak fluids, thereby discharging pollutants into the stormwater. Discharge of any of these pollutants would result in contamination of area drainages. In accordance with the Clean Water Act, Section 402, the Tribe would be required to apply for an NPDES permit for construction activities. Also the tribe is required to comply with the RWQCB general construction permit. This permit requires the development of a storm water plan that would describe best management practices to be implemented to reduce potential impacts to surface and groundwater

resources within the construction site. The proposed project proposes a mitigation measure to reduce this impact to less than significant impact.

Under the proposed project, discharge of treated effluent from the WWTP would be regulated by the RWQCB. Disposal of tertiary treated wastewater of the expected quality -- as defined above in accordance with the RWQCB requirements -- would have less than a significant impact upon ground water and surface water quality. The proposed project proposes a mitigation measure to reduce this impact to less than significant impact.

An aerobic treatment system (ATS), is a small scale sewage treatment system which uses an aerobic process for digestion rather than just the anaerobic process used in septic systems. Unlike the traditional septic system, the aerobic treatment system produces a high quality secondary effluent, which can be sterilized and used for surface irrigation. This allows much greater flexibility in the placement of the leach field, as well as reducing the required size of the leach field by as much as half.

This system is designed for a continuous flow, and do not provide a bed for a bacterial film, relying rather on bacteria suspended in the wastewater. The suspension and aeration are typically provided by an air pump, which pumps air through the aeration chamber, providing a constant stirring of the wastewater in addition to the oxygenation. A medium to promote fixed film bacterial growth may be added to some systems designed to handle higher than normal levels of biomass in the wastewater.

An aerobic system produces a higher quality effluent than a septic tank, and thus the leach field can be smaller than that of a conventional septic system, and the output can be discharged in areas too environmentally sensitive for septic system output. Some aerobic systems recycle the effluent through a sprinkler system, using it to water the lawn where regulations approve.

Since the effluent from an ATS is often discharged onto the surface of the leach field, the quality is very important. A typical ATS will, when operating correctly, produce an effluent with less than 30 mg/liter biochemical oxygen demand, 25 mg/liter total suspended solids, and 10,000 cfu/mL fecal coliform bacteria. This is clean enough that it cannot support a biomat or "slime" layer like a septic tank.

Land Use and Planning: The Tulare County General Plan, Foothill Growth Management Plan, designates the site “Foothill Agriculture” and provides the following Goals and Policies for wastewater treatment plants.

Environmental Protection:

Goal: Protect the Natural Features of the Foothills by Directing Development to Selected Areas.

Policies:

4: Insure that new wastewater systems meet the standards of the Regional Water Quality Control Board and the Tulare County Health Department.

Water and Sewer Facilities:

Goal: Insure that water and sewer facilities are constructed in a manner that protects public health and safety and that the disposal of wastewater is done in a manner that does not degrade ground and/or surface water.

Policies:

1. Require evidence, prior to project approval, which (1) describes a safe and reliable method of wastewater treatment and disposal; and (2) substantiates an adequate water supply for domestic and fire protection.
2. The maintenance and operation of a community water and/or wastewater treatment facility shall be delegated to a responsible entity which is established prior to the approval of the final subdivision map.
3. Based on existing soil conditions, types of land uses, effluent yield per land use and the density of the proposed project, the Regional Water Quality Control Board and the Tulare County Health Department shall review the adequacy of the wastewater disposal area.

Compliance with the standards and regulations of Tulare County's Environmental Heath Division and the RWQCB results in consistency with the General Plan Policies because they pertain to the FGMP Goals and Policies and all other applicable elements of the General Plan.

Noise: Grading and construction activities associated with the construction of the proposed project would be intermittent and temporary. Vibration from the construction activates general dissipates to acceptable levels within 100 feet of the construction site when Impact equipment is not being used (Caltrans 2004). Construction of the proposed project would not utilize impact equipment (i.e. pile drivers). The nearest sensitive receptor is approximately 2,000 feet and vibration from construction activities would not be perceivable.

The proposed project proposes a mitigation measure to reduce this impact to less than significant impact. The majority of construction related noise is anticipated to occur at the proposed WWTP site. Construction noise levels at the project site depend on the type, duration and number of equipment being used. The IS/MND estimates that the noise level at the nearest sensitive receptor would be approximately 59.3 dBA Ldn.

The highest operational sound emitting from the operation of the facility is the diesel generator. The generator will be operated intermittently for maintenance or emergency situations at the WWTP. The estimated sound emitted from the generator is estimated to be approximately 89 dB. As described within the MND the nearest residential unit is approximately 2,000 feet. The noise level at 2,000 feet would be approximately 59.3 dBA. Furthermore, specification 16208 2.02E calls out an exhaust silencer of the "super critical type" and section 16208 2.04B calls out a "weather proof, sound attenuated enclosure." These specifications will result in lower noise volume well below the conservative estimation of construction machinery.

Approximately 240 feet north of the WWTP facility, Reservation Road form the northern boundary of the property. Using a noise attenuation factor of 7.0, as described in the noise analysis of the MND, noise levels at Reservation Road would be less than 73.5 dBA Ldn; and, according to the State Land Use Compatibility Standards for Community Noise Environment, 75 dB Ldn in agricultural areas is considered acceptable. This standard will be adopted by the County upon adoption of the General Plan 2030 Update.

Reservation Road also emanates sound from daily traffic. According to the 2007 traffic model prepared by the Tulare County Association of Governments, the Average Daily traffic for Reservation Road is 2,300 ADT. It is estimated that the noise emanating within 35 feet from the centerline of Reservation Road is 65 dB Ldn. Furthermore, specification 16208 2.02E call out an exhaust silencer of the "super critical type" and section 16208 2.04B calls out a "weather proof, sound attenuated enclosure." These specifications will result in lower noise volume well below the conservative estimation of construction machinery.

Population and Housing: Growth on the Reservation is limited owing to lack of available areas for suitable septic systems. The proposed project is designed to accommodate existing residences and anticipated growth.

Public or Utility Services: The Tribal Fire Department would assume primary fire and emergency protection responsibilities for the proposed project. Response time is approximately seven minutes. The Tribe has indicated no additional fire protection facilities would be required to provide services to the proposed project. The proposed office building will be constructed in accordance with Tulare County fire department requirements. The tribe fire department, which is significantly closer than other fire agencies, will respond initially to any fire. The vast majority of the building material is non-combustible. The proposed project proposes a mitigation measure to reduce this impact to less than significant impact. The reason is that with implementation of mitigation measures as stated within the Hazards and Hazardous Material Section, emergency services access would not be restricted during construction of the proposed project.

Recreation: N/A

Transportation and Traffic: A construction zone traffic control plan -- required in accordance with the American Public Works Association Work Area Traffic Control Handbook -- would be submitted as a part of the Tulare County RMA-Public Works Branch encroachment permit application for pipeline installation. The project requires mitigation to reduce this impact to less than significant impact. The reason is that a construction zone traffic control plan in accordance with the American Public Works Association (APWA) Work Area Traffic Control Handbook, would be submitted as a part of the encroachment permit and the implementation of mitigation measures as stated within the Hazards and Hazardous Material Section would ensure that impacts are reduced.

Utility and Service Systems: The project's Title 22 tertiary level treated effluent will be disposed of via leachfields. The project also includes the construction of one bermed earthen storage basin with a capacity of one million gallons. Potentially untreated effluent may be pumped to the lined and fenced emergency pond. The treatment system is designed with two parallel flow paths that

may be operated separately for redundancy. The basin will be lined to prevent infiltration of stored wastewater. There is no chance of the untreated wastewater pushing over the walls of the overflow lagoon as they are designed to withstand the hydraulic pressure and compaction testing will occur to ensure proper construction. The exterior walls of the berm will be armored with large rock. The top of the berm is at an elevation of 914 feet and the nearby intersection of Chimney Road and Reservation Road surface is approximately 900 feet. Thus, there is no reasonable chance of flooding the overflow lagoon by the nearby drainage which passes beneath the intersection elevation.

Mandatory Findings: The Tribe is anticipated to grow over the next 20 years. Members of the Tribe living outside of the Reservation would like to move to the Reservation. The majority of persons and families currently live, work and attend schools within Tulare County. The number of units constructed by the Tribe is limited to ten housing units per year because of the funding sources. The Tribe has stated this commitment to IHS. Without the WWTP, these units would be placed on septic tanks. The WWTP is designed to accommodate anticipated growth of the Tribe is a safe and healthful manner.

ENVIRONMENTAL DETERMINATION:

The Environmental Assessment Officer hereby approves this Mitigated Negative Declaration for public review of the project, indicating that the project will not have any significant environmental impacts.

APPROVED:

Michael C. Spata,
ENVIRONMENTAL ASSESSMENT OFFICER

By: _____

Date Approved: _____

EXHIBITS:

Exhibit A Initial Study and Mitigated Negative Declaration: Wastewater collection, treatment and disposal system. August 2011
Exhibit B Mitigation and Monitoring Program
Exhibit C Environmental Assessment
- Appendix A IHS Feasibility Study and Supplement
- Appendix B Report of Waste Discharge
- Appendix C Selected Design Drawings
- Appendix D Urbemis Files (Air Quality)
- Appendix E Biological Resources Information
- Appendix F SHPO Correspondence and Confidential Cultural Resource Study Bound under separate cover and not for public review).